Leominster HS - contractor work plan and qualifications list
Bill Wessel
to:
Kimberly Tisa
03/27/2012 09:39 PM
Cc:
Glenn Nelson
Hide Details
From: Bill Wessel <bwessel@smithwessel.com>

To: Kimberly Tisa/R1/USEPA/US@EPA

Cc: Glenn Nelson <gnelson@smithwessel.com>

2 Attachments

RM Tech PCB Project History.pdf Leominster HS3-21 PCB Work Plan 3.21.12 edited version 3-24-12bw.pdf

2nd rev.

Kim

Attached is the plan prepared by the remediation contractor, RM Technologies, as well as a listing of PCBs abatement projects they've conducted.

I wasn't sure if it is acceptable for me to pass this on to you or whether you needed this sent directly by them. If hard copies are needed or if you'd like it submitted in a different format, please let me know.

Thanks.

William C. Wessel

Principal

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PCB projects that capture the last three (3) years:

Stratton Elementary School- Arlington, MA
Fuss & O'Neill EnviroScience
Robert May @617-778-3768
$32,116

Internal Revenue Services- Andover, MA
Columbia Construction
Keith Clark @ 617-592-9968
$1,600,000

Lowell Community Center, Lowell, MA
Consigli Construction Co, Inc.
Mat Scheller @ 508-458-0528
$96,000

UMass Amherst, Lederle GRC, Lab Renovations
D.A. Sullivan & Sons, Inc.
Mark Sullivan @413-584-0310
$24,000

Weymouth Naval Air Station
SPS New England
Bob Coutts
$35,000

Submarine Learning Center
Building 137
P&S Construction, Inc.
Hector Sanchez
$47,900

VA Medical Center
Lincoln Construction
John Millay
$12,445

Methuen Readiness Center
JK Sckalan
$5,000

RM TECHNOLOGIES

Caring for our Customers & the Environment

This WP was revised & resubmitted –

PCB Work Plan

Leominster High School Addition & Renovations

Leominster, MA

Prepared For:

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City of Leominster - Owner

James Jolicoeur, Superintendent of Schools

25 West Street, Leominster, MA

Prepared by:

RM Technologies, Inc. dated March 21, 2012

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Tel. 978-794-0006 | Fax: 978-794-1057

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A. INTRODUCTION

The Leominster High School, located at 122 Granite Street, Leominster, Massachusetts, is currently under renovation and has been found to contain PolyChlorinated Byphenyls (PCBs) containing caulking with levels exceeding the allowable concentration limits specified by the United States Environmental Protection Agency (EPA) Toxic Substance Control Act (TSCA) regulations according to the Work Plan dated February 10, 2012 by Smith and Wessel Associates, Inc.'s (SWA), acting as the environmental consultant for the City of Leominster on this project. This Work Plan addresses the removal and disposal of these materials and the encapsulation of the building surfaces that are known to be contaminated through leaching of the PCBs into the associated substrates. All work will be conducted utilizing engineering controls in accordance with federal, state and local regulations and in accordance with the SWA's Work Plan. The project is being conducted by RM Technologies, Inc. (RMT) for WT Rich Construction, Inc. (WTR) under the supervision of the City of Leominster and its environmental consultant, SWA.

Elevated concentrations of PCBs (50 ppm or greater) were identified in the exterior caulking material around grilles, at decorative facades, and along the expansion joints. PCBs were also identified in window caulk and in the soil immediately adjacent to the building at less than 50 ppm. In addition, PCBs at 50 ppm or greater were identified inside the building along door frames, expansion joint seams, and between steel columns and blocks (see pgs 15 thru 17 of the Work Plan for exact material types and locations). RMT work activities include the removal of the identified regulated PCBs caulking materials and disposal of these materials as PCBs waste and/or mixed PCBs bulk product waste and Asbestos Containing Material (ACM) (vent and door caulking at the site are ACM) as outlined in 40 CFR 761. Adjacent porous materials, such as fiber boards, that contain PCBs will also be removed, properly packaged and disposed of as PCB bulk product waste. This work plan also includes the encapsulation of masonry surfaces from which the caulking was removed and surfaces in close proximity as a result of PCBs leaching into the substrates, thereby providing a barrier between any remnant PCBs on the surfaces and the environment. In accordance with SWA's Plan, we will encapsulate all affected CMU block within caulk seams and at a minimum 36" from the caulk seam and for brick within caulk seams and a minimum of 8" from the caulk seam.

This work does not include any sampling and and/or analysis for confirmatory results of the abatement areas or disposal characterization. The visual inspection and confirmatory surface sampling will be conducted by SWA working directly for the City of Leominster. Post remediation surface sampling results shall be 1 microgram per 100 square centimeters (1 µg/100 cm^2) or less per 40 CFR 761.79. Sampling shall be conducted in accordance with the requirements of SWA's Work Plan.

The remediation work in this plan will take place by phases over a period of two years starting in the spring of 2012 and ending the summer 2013 and (See Work Plan for a detailed phasing schedule). RMT will perform the remediation work in every phase as described in this work plan below utilizing trained and experienced personnel to build full containment isolation barriers with negative pressure and a three chamber decontamination unit to prevent the migration of contaminants out of the work space. All work to be performed under the direct supervision and leadership of the owner's environmental representative.

B. SITE SPECIFIC PROJECT OVERVIEW

In each work space RMT's employees will perform this work safely utilizing engineering controls to ensure that no contaminants leave the work area by erecting and maintaining full isolation containments equipped with negative air machines for negative pressure, a three chamber decontamination unit consisting of a chamber for spent personal protective equipment (PPE), another for personnel and tool cleaning and washing and a clean room for changing into street clothes. Proper PCB announcing signage will be posted at the entrance of the work area to make it a regulated area where only trained and authorized personnel will be allowed.

All RMT's employees who will work in the regulated area will be trained and will have successfully completed the OSHA 40 hours training for hazardous waste and emergency response pursuant to 29 CFR 1910.120, a PCB removal, handling and disposal awareness training as well as a job specific orientation to ensure that employees are apprised of the site safety and health plan that this plan is being followed by all involved. In addition, each of these employees have been trained, certified and

licensed to perform asbestos abatement work in the state of Massachusetts with a minimum field experience of two years.

RMT will look to set up a pre-construction meeting with the all the stakeholders of the project team to better understand the dynamics and rules of the jobsite, determine entry/exit routes, staging areas, location for disposal dumpster and to further plan the logistics to start the work. RMT will mobilize to the Leominster HS building upon acceptance of this work plan by the EPA and the City of Leominster and when authorized by our client WTR. The project will commence with the mobilization of the tools and equipment to physically perform the work, including and not limited to ladders, scaffoldings, etc., material and supplies to build the containments, decontamination units, personnel and site preparation and all required site specific documentation required to perform a successful project including a copy of this work plan.

Every work area will be contained in strict accordance with this work plan and a visual inspection will be requested by the RMT site supervisor from the owner's on site environmental representative before proceeding with any abatement activities. After securing a successful visual inspection RMT workers will prepare themselves with PPEs and proceed with the abatement activities in the following sequence: Caulking gross removal, packaging, labeling and removal from work area, chemical decontamination of all exposed surfaces, final cleanup of containment and tools and equipment, successful visual inspection by SWA, encapsulation of required surfaces to completely separate any remnant PCBs from the environment, further visual inspections by SWA and confirmatory surface sampling. Following successful visual inspection, containment tear down and packaging, labeling and disposal as PCBs contaminated waste all polyethylene used to construct the containment. All remediation activities described comply with EPA TSCA requirements to protect the environment and public health. RMT takes safety seriously to this end RMT Safety Manager will be conducting random unannounced site safety visits to inspect and ensure the effectiveness of this project's site safety and health plan and the adherence to this work plan.

All material shall be disposed of in a manner to meet all federal and state requirements. Therefore, all waste will be placed in DOT approved roll off containers lined with two layers of polyethylene awaiting approval for transportation and disposal.

C. NOTIFICATIONS AND PERMITS

RMT will notify in writing the Massachusetts Department of Safety (DOS), United States Department of Environmental Protection (Northeast Region), the Leominster Fire Department and Health Department 10 working days prior to the start of any actual phased work.

D. WORK PROCEDURES

1. Job Specific Orientation as part of Preparation and setup procedures
    - Perform an initial Health and safety meeting prior to commencing PCB abatement
    - Review Health and safety Plan (HASP)
    - Identify hospital route map
    - Discuss PPEs requirements
    - Review MSDS forms for on-site materials
    - Identify spill preventative measures and response protocol as outlined in HASP
    - Identify evacuation route plan
    - Procedure to ensure electrical equipment has been properly surge protected.
    - Discuss the job site dynamics, rules of conduct and parking requirements
    - Discuss waste staging area procedures and protocols
    - Ensure that all employees paperwork and licenses are up to date and active
    - Discuss and explain this work plan

2. RMT site supervisor shall ensure that the following work practices are utilized:

(a) Work Area Preparation.

Exclusion of Persons from the Work Area. All persons not directly involved in the work operation shall be excluded from the Work Area.

Sign In/Out Log. E ach person entering or leaving the Work Area individually completes the appropriate entries in the sign-in/out log.

Posting of Warning Signs. Warning signs shall be posted at all approaches to the Work Area. Signs shall be posted a sufficient distance from the Work Area to permit a person to read the sign(s) and take precautionary measures to avoid exposure to contaminants being worked on inside the work area, namely PCBs for all work areas and PCBs and Asbestos for work areas involving vent and door caulking.

Shutdown of HVAC Systems. The facility heating, ventilation and air-conditioning (HVAC) systems of the Work Area shall be shut down, locked out and isolated from the work area.

Covering of all surfaces that do not contain PCBs. All surfaces within the work areas not scheduled for PCB remediation or decontamination cleanup shall be covered with plastic. Floor, ceiling and wall covering shall consist of at least two layers of six mil plastic sheeting. All seams and joints shall be sealed with duct tape or equivalent. Plastic sheet coverings shall be completely sealed with duct tape or equivalent.

Isolation of Work Area. The Work Area shall be isolated by sealing all openings, including but not limited to, windows, doors, ventilation openings, drains, grilles, and grates with six mil thick (minimum) plastic sheeting and duct tape. For PCBs on the exterior RMT shall build a sealed five feet wide tunnel along the wall made up of two layers of six mil plastic sheeting supported from the building by wood strapping, scaffolding, studding, plywood, staples and duct tape. All cracks, seams and openings in such construction shall be sealed, so as to prevent the migration of dust out of the Work Area.

GFCI Protection. All sources of electric power for the Work Area shall be ground fault circuit interrupter (GFCI) protected.

Location of Decontamination Facilities. RMT shall install a three-compartment decontamination facility contiguous with the Work Area and used as the only means of entry and egress to and from the work area, as prescribed by 29 CFR Part 1926.1101(j)(1). Except as may be required during emergencies which endanger life or health, the

decontamination facility shall be the sole means through which the isolated work space is accessed while work is in progress.

Requirement For Work Area Ventilation System. RMT shall install a HEPA-filtered Work Area ventilation system through the use of negative air machines to maintain a reduced atmospheric pressure of at least -0.02 column inches of water pressure differential within the contained Work Area. The system shall be in operation at all times from the commencement of the PCBs removal process through encapsulation, wipe sampling and until a successful final air clearance test (for asbestos if present) is performed by the owner's environmental representative. The ventilation equipment utilized shall be of sufficient capacity to provide a minimum of four air changes per hour. Make-up air entering the Work Area shall pass through the decontamination system exclusively. Exhaust air shall be HEPA-filtered before being discharged outside of the Work Area. Exhaust air tubes or ducts associated with the Work Area ventilation system shall be free of leaks. In all cases the exhaust air shall be discharged to the outside of the building.

(b) Sequential removal and cleaning process.

Personal Protection. In any work area once the PCB removal has commenced all employees shall wear the following personal protective equipment (PPEs) inside the work area: Hard hats, protective glasses, Tyvek protective suits, 30 mil nitrile gloves, disposable shoe covers, steel toe working boots and half face respirator equipped with HEPA filters. The PPEs shall be worn inside the work area by all RMT personnel until a successful final air clearance test is performed by the owner's environmental representative.

Personal OSHA Monitoring. OSHA Personal monitoring samples shall be collected in the breathing zone and outside of the respirator face-piece to determine the level of exposure by workers in the work area and the level of effectiveness of the respirator chosen for the job at hand. Results shall be posted within 24 hours on the work area RMT information board in the form of a Negative exposure assessment. If reading levels are elevated the personal respiratory protection will be increased and more engineering controls will be utilized to minimize contaminants from the air. The PEL for PCBs is $1mg/m^3$.

Gross Caulking removal. The caulking shall be removed until no visible caulking remains through the use of small hand and/or power tools. RMT shall take special care not to damage building finishes or construction materials. If a surface has visible damage prior to the commencement of the removal process RMT supervisor will bring it to the attention of the WTR superintendent for documentation and verification and a picture will be taken.

Caulking packaging. Caulking shall be packaged in two six mil poly bags, a generation label will be placed outside the bag indicating the source and the type of caulking inside either PCBs or mixed waste PCBs and asbestos. Bags shall be placed into properly lined roll-off containers for disposal as PCB bulk product waste per 40 CFR 761.3. at a TSCA-approved facility.

Surface cleanup and decontamination. Capsur, a foam-applied aqueous based solvent for the clean-up of PCBs, shall be used to clean non-visible caulking residue from porous surfaces adjacent to the caulk seams. All surfaces within 8 inches in the case of bricks of the caulk seam and within 36 inches for concrete block shall be sprayed with the Capsur foam. The foam will be brushed onto the surface with a stiff brush and left for a five minute dwell time. The residues shall be vacuumed up, and the surfaces lightly rinsed with water and then re-vacuumed. The Capsur cleaning process will be performed twice on all impacted surfaces in the work areas.

Containment cleanup: All areas within the work space shall be thoroughly cleaned and HEPA vacuumed to the point of no visible debris in preparation for a visual inspection by the owner's environmental consultant. Decontamination fluids will be absorbed with rags, placed in poly bags and labeled appropriately. All debris shall be properly packaged in poly bags, labeled and removed to a properly lined roll-off containers for disposal as PCB bulk product waste per 40 CFR 761.3.

Encapsulation. After a successful visual inspection by the owner's environmental consultant, all brick surfaces extending out8 inches from the caulk seam and out 36 inches on concrete block shall be encapsulated with a commercially available epoxy coating chosen by the owner's representative from the list provided as Appendix A. The epoxy shall be evenly applied onto the affected surfaces until fully covered. At a minimum, 2

coats of the encapsulant shall be applied to associated substrates and three coats to the affected caulk seam. SWA will then conduct post remediation wipe samples of representative seams and substrates. If the results are grerater than 1 µg/100 cm^2, additional coats of encapsulant will be applied and the areas retested by SWA. This process will not be complete until acceptable results are attained.

Exterior window caulk removal 1961 building. Because exterior window caulk PCB results were all less than 50 ppm, we are requesting relief from full containment requirements. We are requesting that the containment be limited to sealing the interior window openings with (2) layers of 6 mil polyethylene sheeting and placing polyethylene sheeting at the exterior base of the building extending out 10' and secured. All PCB/ACM caulk will be wet scraped directly into 6 mil disposal bags. At the completion of the removal, the polyethylene ground cover and associated debris will be packaged for disposal as a mixed waste. Following removal of affected caulk, SWA will conduct post remediation visual inspections. Once all the caulk is removed, we will begin the soil remediation as stated below.

Soil removal in all non-paved locations abutting the 1961 building. The poly on the ground will be cut back three feet away from the edge of the exterior wall to expose the soil. RMT workers shall remove and bag in poly bags for proper disposal as PCBs bulk waste the top six inches of the exposed soil.

Final Containment cleaning: All areas within the work space shall be thoroughly cleaned and HEPA vacuum to the point of no visible debris in preparation for a visual inspection, soil sampling, wipe testing and air clearance by the owner's environmental consultant. Additional re-cleaning may occur as required the owner's environmental representative.

3. Decontamination Procedures

Decontamination of Personnel Required. No employees shall leave the Work Area without first decontaminating their persons by wet washing and HEPA vacuuming to remove all visible debris.

Equipment Decontamination. No equipment, supplies, or materials (except properly containerized waste material) shall be removed from the Work Area unless such equipment, supplies or materials have been thoroughly decontaminated free of all visible debris with an appropriate solvent or wipe with a solvent rag as required by 40 CFR 761.79 and 40 CFR 761 Subpart S. Where decontamination is not feasible, as it is the case for filters used such materials shall be wrapped in a minimum of two layers of six mil polyethylene sheeting with all joints, seams and overlaps sealed with tape or containerized in poly bag. Said wrapped equipment, supplies or materials shall be labeled as being PCBs contaminated prior to removal from the Work Area. HEPA vacuums shall be emptied of contents prior to removal from the Work Area. Air filtration devices shall have used pre- filters removed and replaced with fresh filters prior to removal from the Work Area. Used HEPA filters and pre-filters shall all be disposed of as contaminated PCB waste.

4. Waste Staging Area

The waste staging area shall be set up next to the building for direct loading to the extent possible. Watertight, tarped roll-off containers will be staged within these areas and lined with two layers of six mil polyethylene sheeting to handle the PCB affected waste. The roll-offs will be accessed and closed at the end of each trip. At the completion of the day operation the roll-offs will be sealed, secured and labeled.

The filled secured roll-offs containers will be transported when full to the approved disposal facilities listed below. The staging area will then receive another roll-off to repeat the same process until all of the waste has been removed off site. Upon completion of the waste staging and successful remediation operations as determined by the owner's environmental representative, all the polyethylene sheeting and any contaminated debris will be packaged in poly bags, labeled and will be loaded be loaded and disposed at the facilities listed below.

Roll-off cans will be properly labeled with the PCB ML mark and the accumulation start date of the first PCB materials placed into the roll-offs in accordance with storage time limits spelled out in 40 CFR 761.65(c)(9). The roll-offs will be labeled for proper disposal facility designations.

E. TRANSPORTATION AND DISPOSAL FACILITY

PCB contaminated waste shall be transported via a hazardous waste manifest to be signed by the generator (The City of Leominster), transporter and the end facility. Copies of all manifests will be included in the project completion report. Originals shall be the property of the generator.

The PCB waste will be shipped by a licensed hazardous waste transporter. The waste will be shipped via secure, lined, hazardous waste roll-off containers with proper waste shipping manifest documentation. The transporters that may be used are:

Waste Haulers:

Service Transport Group

58 Pyles Lane, New Castle, DE 19720

877-999-9559

U.S.D.O.T# 781586

United Waste Management

155 Bodwell Street, Avon, MA 02322

781-710-5073

Landfills:

Minerva Landfill

9000 Minerva Road

Waynesburg, OH 44688

330-866-3435

Permit#15-1292

Turnkey Landfill of Rochester

97 Rochester Neck Road

Rochester, NH

603-335-3028

F. PROJECT COMPLETION

RMT will provide the City of Leominster with a project completion report that includes waste manifests, waste shipment records and disposal receipts within 45 days of this work being complete.

Appendix A

commercially available epoxy coating

A Pratt and Lambert Palgard Polyamide Epoxy - 2 part white pigmented (also called Polyguard)

B Sika Corporation Sikaguard Epoxy - 2 part gray pigmented

C Sika Corporation Sikaguard Epoxy - 2 part tan pigmented

D Tnemec Co Epoxyrime II - 2 part epoxy clear

E Rust-Oleum Corp Sem-Epoxy- 2 part epoxy clear.

F Pratt and Lambert Enducryl 2 part epoxy clear